

Serial Number: 09/965,116A

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- ☐ Edited a format error in the Current Application Data section, specifically: \_\_\_\_\_
- ☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other \_\_\_\_\_
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: \_\_\_\_\_
- ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: \_\_\_\_\_
- ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: \_\_\_\_\_
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included: \_\_\_\_\_
- ☐ Deleted extra, invalid, headings used by an applicant, specifically: \_\_\_\_\_
- ☒ Deleted: ☒ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as \_\_\_\_\_
- ☐ Inserted mandatory headings, specifically: \_\_\_\_\_
- ☐ Corrected an obvious error in the response, specifically: \_\_\_\_\_
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically: \_\_\_\_\_
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted *ending* stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: \_\_\_\_\_
- ☐ Other: \_\_\_\_\_

\*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

3/1/95

#13



OIPE

## RAW SEQUENCE LISTING

DATE: 03/29/2002

PATENT APPLICATION: US/09/965,116A

TIME: 10:09:34

Input Set : A:\pto\_ms.txt

Output Set: N:\CRF3\03292002\I965116A.raw

```

3 <110> APPLICANT: Kandimalla, Ekambar R.
4     Zhao, Qiuyan
5     Yu, Dong
6     Agrawal, Sudhir
8 <120> TITLE OF INVENTION: Modulation of Immunostimulatory Activity of
Immunostimulatory
9     Modified oligodeoxynucleotide phosphorothioate Analogs by
10    Positional Chemical Changes
12 <130> FILE REFERENCE: HYZ-479CP (47508.577)
14 <140> CURRENT APPLICATION NUMBER: US 09/965,116A
C--> 15 <141> CURRENT FILING DATE: 2002-03-08
17 <150> PRIOR APPLICATION NUMBER: US 09/712,898
18 <151> PRIOR FILING DATE: 2000-11-15
20 <150> PRIOR APPLICATION NUMBER: US 60/235,452
21 <151> PRIOR FILING DATE: 2000-09-26
23 <150> PRIOR APPLICATION NUMBER: US 60/235,453
24 <151> PRIOR FILING DATE: 2000-09-26
26 <160> NUMBER OF SEQ ID NOS: 112
28 <170> SOFTWARE: FastSEQ for Windows Version 4.0
30 <210> SEQ ID NO: 1
31 <211> LENGTH: 18
32 <212> TYPE: DNA
33 <213> ORGANISM: Artificial Sequence
35 <220> FEATURE:
36 <223> OTHER INFORMATION: synthesis of CpG-PS-oligos containing cytosine analogs
38 <400> SEQUENCE: 1
39 ctatctgacg ttctctgt                                     18
41 <210> SEQ ID NO: 2
42 <211> LENGTH: 18
43 <212> TYPE: DNA
44 <213> ORGANISM: Artificial Sequence
46 <220> FEATURE:
47 <223> OTHER INFORMATION: synthesis of CpG-PS-oligos containing cytosine analogs
W--> 49 <221> NAME/KEY: modified_base
50 <222> LOCATION: 9
51 <223> OTHER INFORMATION: c = 5-hydroxydeoxycytidine
W--> 53 <400> 2
54 ctatctgacg ttctctgt                                     18
56 <210> SEQ ID NO: 3
57 <211> LENGTH: 18
58 <212> TYPE: DNA
59 <213> ORGANISM: Artificial Sequence
61 <220> FEATURE:
62 <223> OTHER INFORMATION: synthesis of CpG-PS-oligos containing cytosine analogs

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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/965,116A

DATE: 03/29/2002

TIME: 10:09:34

Input Set : A:\pto\_ms.txt

Output Set: N:\CRF3\03292002\I965116A.raw

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W--> 64 <221> NAME/KEY: modified_base
65 <222> LOCATION: 10
66 <223> OTHER INFORMATION: c = 5-hydroxydeoxycytidine
W--> 68 <400> 3
69 ctatctgacc ttctctgt 18
71 <210> SEQ ID NO: 4
72 <211> LENGTH: 18
73 <212> TYPE: DNA
74 <213> ORGANISM: Artificial Sequence
76 <220> FEATURE:
77 <223> OTHER INFORMATION: synthesis of CpG-PS-oligos containing cytosine analogs
W--> 79 <221> NAME/KEY: modified_base
80 <222> LOCATION: 9
81 <223> OTHER INFORMATION: c = N4-ethyldeoxycytidine
W--> 83 <400> 4
84 ctatctgacg ttctctgt 18
86 <210> SEQ ID NO: 5
87 <211> LENGTH: 18
88 <212> TYPE: DNA
89 <213> ORGANISM: Artificial Sequence
91 <220> FEATURE:
92 <223> OTHER INFORMATION: synthesis of CpG-PS-oligos containing cytosine analogs
W--> 94 <221> NAME/KEY: modified_base
95 <222> LOCATION: 10
96 <223> OTHER INFORMATION: c = N4-ethyldeoxycytidine
W--> 98 <400> 5
99 ctatctgacc ttctctgt 18
101 <210> SEQ ID NO: 6
102 <211> LENGTH: 16
103 <212> TYPE: DNA
104 <213> ORGANISM: Artificial Sequence
106 <220> FEATURE:
107 <223> OTHER INFORMATION: synthesis of end-blocked CpG-PS modified
oligodeoxynucleotide
108 phosphorothioate
110 <400> SEQUENCE: 6
111 aaggtcgagc gttctc 16
113 <210> SEQ ID NO: 7
114 <211> LENGTH: 18
115 <212> TYPE: DNA
116 <213> ORGANISM: Artificial Sequence
W--> 117 <220> FEATURE:
118 <223> OTHER INFORMATION: synthesis of end-blocked CpG-PS modified
oligodeoxynucleotide
119 phosphorothioate
121 <400> SEQUENCE: 7
122 atggcgcacg ctgggaga 18
124 <210> SEQ ID NO: 8
125 <211> LENGTH: 18
126 <212> TYPE: DNA
127 <213> ORGANISM: Artificial Sequence

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## RAW SEQUENCE LISTING

DATE: 03/29/2002

PATENT APPLICATION: US/09/965,116A

TIME: 10:09:34

Input Set : A:\pto\_ms.txt

Output Set: N:\CRF3\03292002\I965116A.raw

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129 <220> FEATURE:
130 <223> OTHER INFORMATION: oligodeoxynucleotide phosphorothioate
132 <400> SEQUENCE: 8
133 cctactagcg ttctcatc 18
135 <210> SEQ ID NO: 9
136 <211> LENGTH: 18
137 <212> TYPE: DNA
138 <213> ORGANISM: Artificial Sequence
140 <220> FEATURE:
141 <223> OTHER INFORMATION: oligodeoxynucleotide phosphorothioate
W--> 143 <221> NAME/KEY: modified_base
144 <222> LOCATION: 10
145 <223> OTHER INFORMATION: g = 1',2'-Dideoxyribose
W--> 147 <400> 9
148 cctactagcg ttctcatc 18
150 <210> SEQ ID NO: 10
151 <211> LENGTH: 18
152 <212> TYPE: DNA
153 <213> ORGANISM: Artificial Sequence
155 <220> FEATURE:
156 <223> OTHER INFORMATION: modified oligodeoxynucleotide phosphorothioate
W--> 158 <221> NAME/KEY: modified_base
159 <222> LOCATION: 8
160 <223> OTHER INFORMATION: g = 1',2'-Dideoxyribose
W--> 162 <400> 10
163 cctactagcg ttctcatc 18
165 <210> SEQ ID NO: 11
166 <211> LENGTH: 18
167 <212> TYPE: DNA
168 <213> ORGANISM: Artificial Sequence
170 <220> FEATURE:
171 <223> OTHER INFORMATION: modified oligodeoxynucleotide phosphorothioate
W--> 173 <221> NAME/KEY: modified_base
174 <222> LOCATION: 7
175 <223> OTHER INFORMATION: a = 1',2'-Dideoxyribose
W--> 177 <400> 11
178 cctactagcg ttctcatc 18
180 <210> SEQ ID NO: 12
181 <211> LENGTH: 18
182 <212> TYPE: DNA
183 <213> ORGANISM: Artificial Sequence
185 <220> FEATURE:
186 <223> OTHER INFORMATION: modified oligodeoxynucleotide phosphorothioate
W--> 188 <221> NAME/KEY: modified_base
189 <222> LOCATION: 6
190 <223> OTHER INFORMATION: t = 1',2'-Dideoxyribose
W--> 192 <400> 12
193 cctactagcg ttctcatc 18
195 <210> SEQ ID NO: 13

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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/965,116A

DATE: 03/29/2002

TIME: 10:09:34

Input Set : A:\pto\_ms.txt

Output Set: N:\CRF3\03292002\I965116A.raw

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196 <211> LENGTH: 18
197 <212> TYPE: DNA
198 <213> ORGANISM: Artificial Sequence
200 <220> FEATURE:
201 <223> OTHER INFORMATION: modified oligodeoxynucleotide phosphorothioate
W--> 203 <221> NAME/KEY: modified_base
204 <222> LOCATION: 5
205 <223> OTHER INFORMATION: c = 1',2'-Dideoxyribose
W--> 207 <400> 13
208 cctactagcg ttctcatc 18
210 <210> SEQ ID NO: 14
211 <211> LENGTH: 18
212 <212> TYPE: DNA
213 <213> ORGANISM: Artificial Sequence
215 <220> FEATURE:
216 <223> OTHER INFORMATION: modified oligodeoxynucleotide phosphorothioate
W--> 218 <221> NAME/KEY: modified_base
219 <222> LOCATION: 4
220 <223> OTHER INFORMATION: a = 1',2'-Dideoxyribose
W--> 222 <400> 14
223 cctactagcg ttctcatc 18
225 <210> SEQ ID NO: 15
226 <211> LENGTH: 18
227 <212> TYPE: DNA
228 <213> ORGANISM: Artificial Sequence
230 <220> FEATURE:
231 <223> OTHER INFORMATION: modified oligodeoxynucleotide phosphorothioate
W--> 232 <221> NAME/KEY: modified_base
233 <222> LOCATION: 4
234 <223> OTHER INFORMATION: a = 1',2'-Dideoxyribose
W--> 236 <400> 15
237 cctactagcc ttctcatc 18
239 <210> SEQ ID NO: 16
240 <211> LENGTH: 18
241 <212> TYPE: DNA
242 <213> ORGANISM: Artificial Sequence
244 <220> FEATURE:
245 <223> OTHER INFORMATION: modified oligodeoxynucleotide phosphorothioate
W--> 247 <221> NAME/KEY: modified_base
248 <222> LOCATION: 11
249 <223> OTHER INFORMATION: t = 1',2'-Dideoxyribose
W--> 251 <400> 16
252 cctactagcg ttctcatc 18
254 <210> SEQ ID NO: 17
255 <211> LENGTH: 18
256 <212> TYPE: DNA
257 <213> ORGANISM: Artificial Sequence
259 <220> FEATURE:
260 <223> OTHER INFORMATION: modified oligodeoxynucleotide phosphorothioate

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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/965,116A

DATE: 03/29/2002

TIME: 10:09:34

Input Set : A:\pto\_ms.txt

Output Set: N:\CRF3\03292002\I965116A.raw

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W--> 262 <221> NAME/KEY: modified_base
      263 <222> LOCATION: 12
      264 <223> OTHER INFORMATION: t = 1',2'-Dideoxyribose
W--> 266 <400> 17
      267 cctactagcg ttctcatc
      269 <210> SEQ ID NO: 18
      270 <211> LENGTH: 18
      271 <212> TYPE: DNA
      272 <213> ORGANISM: Artificial Sequence
      274 <220> FEATURE:
      275 <223> OTHER INFORMATION: modified oligodeoxynucleotide phosphorothioate
W--> 277 <221> NAME/KEY: modified_base
      278 <222> LOCATION: 13
      279 <223> OTHER INFORMATION: c = 1',2'-Dideoxyribose
W--> 281 <400> 18
      282 cctactagcg ttctcatc
      284 <210> SEQ ID NO: 19
      285 <211> LENGTH: 18
      286 <212> TYPE: DNA
      287 <213> ORGANISM: Artificial Sequence
      289 <220> FEATURE:
      290 <223> OTHER INFORMATION: modified oligodeoxynucleotide phosphorothioate
W--> 292 <221> NAME/KEY: modified_base
      293 <222> LOCATION: 14
      294 <223> OTHER INFORMATION: t = 1',2'-Dideoxyribose
W--> 296 <400> 19
      297 cctactagcg ttctcatc
      299 <210> SEQ ID NO: 20
      300 <211> LENGTH: 18
      301 <212> TYPE: DNA
      302 <213> ORGANISM: Artificial Sequence
      304 <220> FEATURE:
      305 <223> OTHER INFORMATION: modified oligodeoxynucleotide phosphorothioate
W--> 307 <221> NAME/KEY: modified_base
      308 <222> LOCATION: 4, 5
      309 <223> OTHER INFORMATION: ac = 1',2'-Dideoxyribose
W--> 311 <400> 20
      312 cctactagcg ttctcatc
      314 <210> SEQ ID NO: 21
      315 <211> LENGTH: 18
      316 <212> TYPE: DNA
      317 <213> ORGANISM: Artificial Sequence
      319 <220> FEATURE:
      320 <223> OTHER INFORMATION: modified oligodeoxynucleotide phosphorothioate
W--> 322 <221> NAME/KEY: modified_base
      323 <222> LOCATION: 1, 2
      324 <223> OTHER INFORMATION: cc = 1',2'-Dideoxyribose
W--> 326 <400> 21
      327 cctactagcg ttctcatc

```

## VERIFICATION SUMMARY

PATENT APPLICATION: US/09/965,116A

DATE: 03/29/2002

TIME: 10:09:35

Input Set : A:\pto\_ms.txt

Output Set: N:\CRF3\03292002\I965116A.raw

L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:49 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:53 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:2  
L:64 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:68 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:3  
L:79 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:83 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:4  
L:94 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:98 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:5  
L:117 M:283 W: Missing Blank Line separator, <220> field identifier  
L:143 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:147 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:9  
L:158 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:162 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:10  
L:173 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:177 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:11  
L:188 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:192 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:12  
L:203 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:207 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:13  
L:218 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:222 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:14  
L:232 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:236 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:15  
L:247 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:251 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:16  
L:262 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:266 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:17  
L:277 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:281 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:18  
L:292 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:296 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:19  
L:307 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:311 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:20  
L:322 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:326 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:21  
L:337 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:341 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:22  
L:352 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:357 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:23  
L:368 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:372 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:24  
L:383 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:387 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:25  
L:398 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:402 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:26  
L:413 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:418 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:27

## VERIFICATION SUMMARY

PATENT APPLICATION: US/09/965,116A

DATE: 03/29/2002

TIME: 10:09:35

Input Set : A:\pto\_ms.txt

Output Set: N:\CRF3\03292002\I965116A.raw

L:429 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:433 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:28  
L:444 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:448 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:29  
L:459 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:463 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:30  
L:474 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:479 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:31  
L:490 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:494 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:32  
L:505 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:509 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:33  
L:520 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:524 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:34  
L:535 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:539 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:35  
L:550 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:554 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:36  
L:565 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:569 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:37  
L:580 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:584 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:38  
L:595 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:599 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:39  
L:610 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:614 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:40  
L:625 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:629 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:41  
L:639 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:643 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:42  
L:654 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:658 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:43  
L:669 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:673 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:44  
L:684 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:688 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:45  
L:699 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:703 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:46  
L:714 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:718 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:47  
L:729 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:733 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:48  
L:744 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:748 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:49  
L:759 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:763 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:50  
L:774 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:778 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:51  
L:789 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!



## VERIFICATION SUMMARY

PATENT APPLICATION: US/09/965,116A

DATE: 03/29/2002

TIME: 10:09:35

Input Set : A:\pto\_ms.txt

Output Set: N:\CRF3\03292002\I965116A.raw

L:793 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:52  
L:804 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:808 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:53  
L:819 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:823 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:54  
L:973 M:283 W: Missing Blank Line separator, <400> field identifier  
L:1600 M:283 W: Missing Blank Line separator, <400> field identifier



Does Not Comply  
Corrected Diskette Needed

OIPE

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/965,116A

DATE: 03/26/2002

TIME: 16:24:51

Input Set : A:\47508-577.ST25.txt

Output Set: N:\CRF3\03262002\I965116A.raw

3 <110> APPLICANT: Kandimalla, Ekambar R.  
 4 Zhao, Qiuyan  
 5 Yu, Dong  
 6 Agrawal, Sudhir  
 8 <120> TITLE OF INVENTION: Modulation of Immunostimulatory Activity of  
 Immunostimulatory  
 9 Modified oligodeoxynucleotide phosphorothioate Analogs by  
 10 Positional Chemical Changes  
 12 <130> FILE REFERENCE: HYZ-479CP (47508.577)  
 14 <140> CURRENT APPLICATION NUMBER: US 09/965,116A  
 C--> 15 <141> CURRENT FILING DATE: 2002-03-08  
 17 <150> PRIOR APPLICATION NUMBER: US 09/712,898  
 18 <151> PRIOR FILING DATE: 2000-11-15  
 20 <150> PRIOR APPLICATION NUMBER: US 60/235,452  
 21 <151> PRIOR FILING DATE: 2000-09-26  
 23 <150> PRIOR APPLICATION NUMBER: US 60/235,453  
 24 <151> PRIOR FILING DATE: 2000-09-26  
 26 <160> NUMBER OF SEQ ID NOS: 112  
 28 <170> SOFTWARE: FastSEQ for Windows Version 4.0

## ERRORED SEQUENCES

1678 <210> SEQ ID NO: 112  
 1679 <211> LENGTH: 18  
 1680 <212> TYPE: DNA  
 1681 <213> ORGANISM: Artificial Sequence  
 1683 <220> FEATURE:  
 1684 <223> OTHER INFORMATION: modified oligodeoxynucleotide phosphorothioate  
 1686 <221> NAME/KEY: modified\_base  
 1687 <222> LOCATION: 13  
 1688 <223> OTHER INFORMATION: c = 1',2'-Dideoxyribose  
 1690 <400> SEQUENCE: 112  
 1691 ctatctgacg ttctctgt  
 E--> 1693 hyz-479cP(47508-577).st25  
 E--> 1699 Page 1

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Remove extra material at  
end of file

## VERIFICATION SUMMARY

PATENT APPLICATION: US/09/965,116A

DATE: 03/26/2002

TIME: 16:24:53

Input Set : A:\47508-577.ST25.txt

Output Set: N:\CRF3\03262002\I965116A.raw

L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:117 M:283 W: Missing Blank Line separator, <220> field identifier  
L:973 M:283 W: Missing Blank Line separator, <400> field identifier  
L:1600 M:283 W: Missing Blank Line separator, <400> field identifier  
L:1693 M:254 E: No. of Bases conflict, LENGTH:Input:25 Counted:30 SEQ:112  
L:1693 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:18  
L:1693 M:112 C: (48) String data converted to lower case,  
M:254 Repeated in SeqNo=112  
L:1699 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:2  
L:1699 M:252 E: No. of Seq. differs, <211>LENGTH:Input:18 Found:34 SEQ:112